What Are Canker Sores?

Canker sores are small, painful ulcers that develop inside the mouth.

Who Is Affected by Canker Sores?

Canker sores are common, affecting an estimated 39% to 50% of people during their lifetime. Onset typically occurs between ages 10 and 19 years, and canker sores are slightly more common in females than males. Some individuals get canker sores once or twice a year; others develop them more than once a month. The frequency of canker sores usually declines with age.

What Causes Canker Sores?

The cause of canker sores is unclear but may be related to an immune reaction, genetic factors, or deficiencies in nutrients, including vitamin B_{12}, folic acid, and ferritin. Canker sores are more common in patients with certain medical conditions, such as celiac disease, Behçet disease, inflammatory bowel disease (ulcerative colitis and Crohn disease), iron-deficiency anemia, and HIV/AIDS. Sodium lauryl sulfate, a primary cleansing agent in toothpaste, has also been associated with canker sores.

Types of Canker Sores

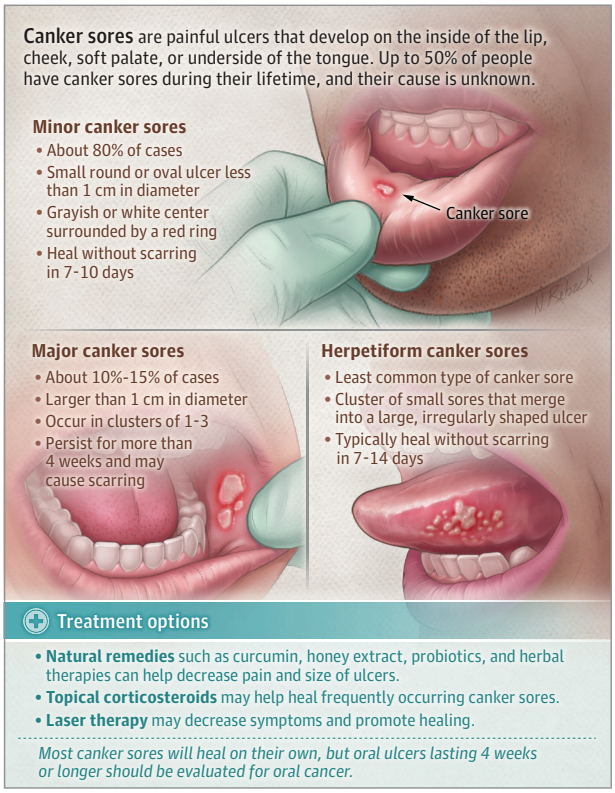
There are 3 categories of canker sores based on the size and number of ulcers.

- **Minor canker sores** comprise about 80% of all canker sores. They are small (less than 1 cm), painful, round- or oval-shaped grayish-white ulcers encircled by a red ring that can occur on the inside lining of the lips and cheeks, the underside of the tongue, and the area of the mouth below the tongue. Minor canker sores usually heal without scarring within 7 to 10 days.
- **Major canker sores** are the most severe type, accounting for about 10% to 15% of canker sores. They often occur in clusters of 1 to 3 ulcers on the lips, throat, and soft palate (the back part of the roof of the mouth). Major canker sores are painful ulcers that are larger than 1 cm, may persist for longer than 4 weeks, and often cause scarring.
- **Herpetiform canker sores** are the least common type. They are very small painful ulcers that often merge to form larger, irregularly shaped ulcers. Herpetiform canker sores typically heal without scarring within 7 to 14 days.

How Are Canker Sores Treated?

Most canker sores heal on their own. Natural compounds such as curcumin and honey extract as well as herbal therapies and probiotics can decrease canker sore pain and may reduce the size of the ulcers.

For individuals with recurrent canker sores, topical corticosteroids may reduce the size and frequency of the ulcers. Laser therapy may also help decrease symptoms and promote healing. People with severe or frequently recurring canker sores may be prescribed oral medications (corticosteroids, colchicine, azathioprine, dapsone, thalidomide, or pentoxifylline) to improve healing and/or reduce recurrence.


Canker sores are painful ulcers that develop on the inside of the lip, cheek, soft palate, or underside of the tongue. Up to 50% of people have canker sores during their lifetime, and their cause is unknown.
Minor canker sores
• About 80% of cases
• Small round or oval ulcer less than 1 cm in diameter
• Grayish or white center surrounded by a red ring
• Heal without scarring in 7-10 days
Canker sore
Major canker sores
• About 10%-15% of cases
• Larger than 1 cm in diameter
• Occur in clusters of 1-3
• Persist for more than 4 weeks and may cause scarring
Herpetiform canker sores
• Least common type of canker sore
• Cluster of small sores that merge into a large, irregularly shaped ulcer
• Typically heal without scarring in 7-14 days
Treatment options
• **Natural remedies** such as curcumin, honey extract, probiotics, and herbal therapies can help decrease pain and size of ulcers.
• **Topical corticosteroids** may help heal frequently occurring canker sores.
• **Laser therapy** may decrease symptoms and promote healing.
Most canker sores will heal on their own, but oral ulcers lasting 4 weeks or longer should be evaluated for oral cancer.

When to Seek Medical Evaluation for Oral Ulcers

Individuals with a nonhealing ulcer in the mouth that persists for more than 4 weeks should be evaluated for oral cancer; a biopsy may be necessary. New-onset canker sores in patients older than 40 years may be associated with an underlying medical condition such as celiac disease, Behçet disease, inflammatory bowel disease, iron-deficiency anemia, or HIV/AIDS.

FOR MORE INFORMATION

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